1 In the claims:

2 1.   A method for enabling users of a network to create, store, and provide access to

3 relationships among document objects stored on the network, the method comprising the

4 steps of:

5   allowing a user of the network to create a link relationship between a first

6   document object and a second document object;

7   storing the link relationship in one or more link directories; and

8   providing all users of the network access to the link relationships stored in

9   the one or more link directories based upon the document object currently

10   accessed by the user.

11 2.   The method of claim 1, wherein the providing step comprises providing access

12 only to authorized users.

13 3.   The method of claim 1, further comprising authorizing users of the network to

14 perform the allowing, storing and providing steps.

15 4.   The method of claim 1, wherein the allowing step comprises:

16   a first user locating a first document object;

17   the first user locating a second document object related to the first

18   document object in some manner determined by the first user; and

19   the first user creating a link relationship between the first document object

20   and the second document object.

21 5.   The method of claim 4, wherein one or more of the steps of the method are

22 accomplished by automated procedures not requiring interaction with the user.

23 6.   The method of claim 1, wherein the storing step comprises:

24   storing a link relationship entry in a link relationship table, wherein the

25   link relationship entry comprises fields including a first link reference to the first

26   document object and a second link reference to the second document object;

27   assigning link relationship attributes to the link relationship entry; and

28   setting a directional indicator for the link relationship entry.

29 7.   The method of claim 6, wherein the step of storing the link relationship in one or

30 more link directories further comprises:

31   storing the first link reference to the first document object in a document

32   object table;

33   assigning document object attributes to the first link reference associated

34   with the first document object;

1   storing the second link reference to the second document object in a

2   document object table; and

3   assigning document object attributes to the second link reference

4   associated with the second document object.

5   8.   The method of claim 7, wherein one or more of the link relationship attributes are

6 set; and a directional indicator for the link relationship attribute is set by associating one

7 document object attribute for the first link reference with one document object attribute

8 for the second link reference.

9   9.   The method of claim 4 further comprising displaying to a second user a link

10 reference to a document object related to a document object the second user is currently

11 accessing, wherein the link reference displayed to the second user is determined by

12 identifying those link relationships stored in the one or more link directories that include a

13 link reference to a network address of the currently accessed document object.

14   10.   The method of claim 9, wherein the displaying step comprises displaying more

15 than one link reference from one or more link directories.

16   11.   The method of claim 9, wherein the displaying step comprises sorting and

17 presenting one or more link references by the one or more link directories storing the link

18 references.

19   12.   The method of claim 11, wherein the displaying step comprises sorting and

20 presenting the one or more link references by attributes of the link relationships and link

21 references.

22   13.   The method of claim 1, wherein the method is used on one or more of: a private

23 network, a closed network, a public network, and a private network that is connected to a

24 public network.

25   14.   The method of claim 1, wherein the one or more link directories are accessible

26 only by a specific individual user of a client device.

27   15.   The method of claim 1 wherein the one or more link directories may be stored on

28 a server connected to the network by means of a secure connection.

29   16.   The method of claim 1 further comprising assigning attributes to the link

30 relationship established between the first document object and the second document

31 object.

32   17.   The method of claim 16 further comprising assigning attributes to a first link

33 reference to the first document object and a second link reference to the second document

34 object.

1 18. The method of claim 16 wherein the link relationship stored in the one or more

2 link directories may be organized, sorted, searched and filtered by one or more attributes

3 assigned to the link relationships.

4 19. The method of claim 17 wherein the link references stored in the one or more link

5 directories may be organized, sorted, searched and filtered by one or more attributes

6 assigned to the link references.

7 20. The method of claim 1, wherein the step of providing one or more link references

8 to document objects on the network comprises:

9   selecting the displayed link references for display based on a link

10   relationship to the currently displayed document object; and

11   filtering the displayed link references by attributes.

12 21. A system for establishing and providing access to relationships between document

13 objects stored on a network wherein the relationship between a first document object and

14 a second document object may be created by an individual user of the network and

15 provided to other users of the network, the system comprising:

16   one or more client devices that access document objects stored on the

17   network and allow creation of link relationships between a first document object

18   and a second document object; and

19   one or more servers that store the link relationships created by the client

20   devices and transmit one or more link relationships and link references to the

21   client devices.

22 22. The system of claim 21, wherein the one or more servers filter and sort the link

23 relationships and link references before transmitting the link relationships and link

24 references to the client devices.

25 23. The system of claim 21, wherein the client devices filter and sort the link

26 relationships and link references after the link relationships and link references are

27 transmitted to the client devices from the one or more servers.

28 24. The system of claim 21, wherein the one or more servers comprise:

29   one or more link directories that store the link relationships created on the

30   one or more client devices;

31   a server manager module that coordinates communication between the one

32   or more link directories, a user directory, a database of user profile data, and the

33   one or more client devices if those client devices are requesting services from the

34   server; and

1   a user data store that stores information regarding authorized users of the

2   servers and link directories.

3   25.   The system of claim 24, wherein the user data store comprises:

4   a user directory, the user directory comprising one or more user data

5   records containing personal identifying information and information regarding

6   which of the one or more link directories and the one or more servers a user may

7   be authorized to access;

8   a user profile store, the user profile store comprising one or more user

9   profile records each containing one or more user profiles for each authorized user

10   of the servers and link directories; and

11   a user account store, the user account store comprising one or more user

12   account records each containing Linkspace system usage data for each authorized

13   user of the servers and link directories.

14   26.   The system of claim 21, wherein the one or more client devices comprise:

15   a client tool, wherein the client tool comprises a Linkspace graphic user

16   interface display;

17   a rendering tool that renders and displays document objects, the rendering

18   tool comprising:

19   a graphic user interface display; and

20   a document object network address; and

21   a network access tool that connects the rendering tool and the client tool to

22   the network.

23   27.   The system of claim 26, wherein the document object network address comprises

24   a Uniform Resource Locator.

25   28.   The system of claim 26, wherein the client device further comprises one of:

26   one or more link directories that store the link relationships;

27   a communications module that coordinates communication between the

28   one or more link directories, a user directory, a database of user profile data, and

29   the one or more client devices; and

30   a user data store that stores information regarding authorized users of the client

31   tool.

32   29.   The system of claim 24, wherein the one or more link directories comprise:

33   a link relationship table comprising a plurality of link relationship entries,

34   the link relationship entries comprising:

1   a first field comprising a first link reference to the first document

2   object of the link relationship;

3   a second field comprising a second link reference to the second

4   document object of the link relationship;

5   one or more link relationship attributes providing information that

6   places the link relationship in a context useful to the user; and

7   a directional indicator that indicates whether the link relationship

8   between the first link reference to the first document object and the second

9   link reference to the second document object applies in either direction or

10   in both directions.

11   30.   The system of claim 29, wherein the directional indicator comprises a plurality of

12 directional indicator fields, each directional indicator field corresponding to one of the

13 one or more link relationship attributes and indicating whether the corresponding link

14 relationship attribute applies in one direction or in both directions between the first link

15 reference to the first document object and the second link reference to the second

16 document object.

17   31.   The system of claim 29, wherein the one or more link directories further comprise:

18   a document object table comprising a plurality of link reference entries, the

19   link reference entries comprising:

20   a network address of the document object on the network indicated

21   by the link reference entry; and

22   one or more document object attributes providing information that

23   places the document object indicated by the link reference entry in a

24   context that is useful to the user.

25   32.   The system of claim 31, wherein the network address comprises a Uniform

26 Resource Locator.

27   33.   The system of claim 32, wherein the link reference entries further comprise a

28 listing of all link relationship entries in which the network address of the document object

29 indicated by the link reference entry is present in the first field or the second field of the

30 link relationship entries.

31   34.   The system of claim 33, wherein the network address comprises a Uniform

32 Resource Locator.

1 35.   The system of claim 29, wherein the network address of the document object on

2 the network may include only that information necessary to specify the location of the

3 document object on the network.

4 36.   The system of claim 35, wherein the network address comprises a Uniform

5 Resource Locator.

6 37.   The system of claim 21, wherein the network is one or more of: a private

7 network, a closed network, a public network, and a private network that is connected to a

8 public network.

9 38.   The system of claim 21, wherein the one or more link directories are accessible

10 only by a specific individual user of a client device.

11 39.   The system of claim 21, wherein the one or more link directories may be stored on

12 a server connected to the network by means of a secure connection.

13 40.   A computer readable medium upon which is embedded instructions for carrying

14 out a method for enabling users of a network to create, store, and provide access to

15 relationships among document objects stored on the network, the method comprising the

16 steps of:

17   allowing a user of the network to create a link relationship between a first

18   document object and a second document object;

19   storing the link relationship in one or more link directories; and

20   providing all users of the network access to the link relationships stored in

21   the one or more link directories based upon the document object currently

22   accessed by the user.

23 41.   The computer readable medium of claim 40, wherein the providing step comprises

24 providing access only to authorized users.

25 42.   The computer readable medium of claim 40, further comprising authorizing users

26 of the network to perform the allowing, storing and providing steps.

27 43.   The computer readable medium of claim 40, wherein the allowing step comprises:

28   a first user locating a first document object;

29   the first user locating a second document object related to the first

30   document object in some manner determined by the first user; and

31   the first user creating a link relationship between the first document object

32   and the second document object.

1   44.   The computer readable medium of claim 43, wherein one or more of the steps of

2   the method are accomplished by automated procedures not requiring interaction with the

3   user.

4   45.   The computer readable medium of claim 40, wherein the storing step comprises:

5   storing a link relationship entry in a link relationship table, wherein the

6   link relationship entry comprises fields including a first link reference to the first

7   document object and a second link reference to the second document object;

8   assigning link relationship attributes to the link relationship entry; and

9   setting a directional indicator for the link relationship entry.

10   46.   The computer readable medium of claim 45, wherein the step of storing the link

11   relationship in one or more link directories further comprises:

12   storing the first link reference to the first document object in a document

13   object table;

14   assigning document object attributes to the first link reference associated

15   with the first document object;

16   storing the second link reference to the second document object in a

17   document object table; and

18   assigning document object attributes to the second link reference

19   associated with the second document object.

20   47.   The computer readable medium of claim 46, wherein one or more of the link

21   relationship attributes are set; and a directional indicator for the link relationship attribute

22   is set by associating one document object attribute for the first link reference with one

23   document object attribute for the second link reference.

24   48.   The computer readable medium of claim 43 further comprising:

25   selecting a link reference to a first document object related to a second

26   document object that a second user is currently accessing, by identifying those

27   link relationships, stored in the one or more link directories, that include a link

28   reference to a network address of the second document object the second user is

29   currently accessing; and

30   displaying the selected link reference to the second user.

31   49.   The computer readable medium of claim 48, wherein the displaying step

32   comprises displaying more than one link reference from one or more link directories.

50. The method of claim 48, wherein the displaying step comprises sorting and presenting one or more link references by the one or more link directories storing the link references.

51. The method of claim 50, wherein the displaying step comprises sorting and presenting the one or more link references by attributes of the link relationships and link references.

52. The computer readable medium of claim 40, wherein the one or more link directories are accessible only by a specific individual user of a client device.

53. The computer readable medium of claim 40 wherein the one or more link directories may be stored on a server connected to the network by means of a secure connection.

54. The computer readable medium of claim 40 further comprising assigning attributes to the link relationship established between the first document object and the second document object.

55. The computer readable medium of claim 54 further comprising assigning attributes to a first link reference to the first document object and a second link reference to the second document object.

56. The computer readable medium of claim 54 wherein the link relationship stored in the one or more link directories may be organized, sorted, searched and filtered by one or more attributes assigned to the link relationships.

57. The computer readable medium of claim 55 wherein the link references stored in the one or more link directories may be organized, sorted, searched and filtered by one or more attributes assigned to the link references.